USPTO

STIC Search Report
EIC 2800

STIC Database Tracking Number: 144276

TO: Michael Cygan
Location:
Art Unit : 2855
Wednesday, February 09, 2005
Case Serial Number: 10/761171

From: Bode Fagbohunka
Location: EIC 2800
Jeff 4A58
Phone: 571-272-2541
bode.fagbohunka@uspto.gov

Search Notes

Examiner **Michael Cygan**

Please find attached the results of your search for **10/761171** The search was conducted using the standard collection of databases on dialog for EIC 2800. The tagged references appear to be the closest references located during our search.

If you would like a re-focus please let me know or if you have any questions regarding the search results please do not hesitate to contact me.

Bode Fagbohunka

Search and Information Resources Administration

144276

SEARCH REQUEST FORM Scientific and Technical Information Center - EIC2800

Rev. 3/15/2004 This is an experimental format -- Please give suggestions or comments to Jeff Harrison, JEF-4B68, 272-2511.

Date 2-4-05 Serial # 10/761171 Priority Application Date _____

Your Name Michael Cygan Examiner # 77553

AU 2855 Phone 272-2175 Room JEF-8A51

In what format would you like your results? Paper is the default. PAPER DISK EMAIL

If submitting more than one search, please prioritize in order of need.

The EIC searcher normally will contact you before beginning a prior art search. If you would like to sit with a searcher for an interactive search, please notify one of the searchers.

Where have you searched so far on this case?
Circle: USPT DWPI EPO Abs JPO Abs IBM TDB

Other: _____

What relevant art have you found so far? Please attach pertinent citations or Information Disclosure Statements. _____

What types of references would you like? Please checkmark:

Primary Refs ____ Nonpatent Literature ___ Other _____
Secondary Refs ___ Foreign Patents ____
Teaching Refs ___

What is the topic, such as the **novelty**, motivation, utility, or other specific facets defining the desired **focus** of this search? Please include the concepts, synonyms, keywords, acronyms, registry numbers, definitions, structures, strategies, and anything else that helps to describe the topic. Please attach a copy of the abstract and pertinent claims.

Staff Use Only	Type of Search	Vendors
Searcher: Bose Raghuram	Structure (#)_____	STN_____
Searcher Phone: 22541	Bibliographic ✓	Dialog ✓
Searcher Location: STIC-EIC2800, JEF-4B68	Litigation_____	Questel/Orbit_____
Date Searcher Picked Up: 2-9-05	Fulltext_____	Lexis-Nexis_____
Date Completed: 2-9-05	Patent Family_____	WWW/Internet_____
Searcher Prep/Rev Time: 40	Other_____	Other_____
Online Time: 240		

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Set     Items   Description
S1        146   AU= (KEENER S? OR KEENER, S? OR BYRD, N? OR BYRD N?)
S3    4760722   FLOW? ?
S4      63893   SEALANT? ? OR VISCOUS()MATERIAL?
S5      69709   (FIRST OR SECOND)(3N)(PLATE? OR SPECIMEN?)
S6    7858296   TEST?
S7      14406   INITIAL(3N)MASS
S8     245360   EXTRUD????
S9     935250   S3(3N)(PATTERN? OR CHARACTER? OR RATE OR STYLE OR METHOD? ?
             OR MODE?)
S10    577264   S9 AND (MEASUR? OR CALCULAT? OR DETERMIN? OR ESTIMAT? OR E-
            VALUAT?  OR ANALY?)
S11       295   S10 AND S4
S12         0   S10 AND S5 AND S7 AND S8
S13         0   S11 AND S5 AND S7 AND S8
S14         0   S11 AND S1
S15         7   S1 AND S4
S16         0   S15 AND S7
S17         7   RD S15 (unique items)
S18         1   S11 AND S7
S19        12   S11 AND INITIAL
S20        11   S19 NOT S18
S21        11   RD (unique items)
S22        20   S8 AND S11
S23        20   RD (unique items)
S24        20   S23 NOT (S21 OR S15)
S25     79864   FLOW? ?(2N)CHARACTER?
S26     14439   S25 AND S6
S27        30   S26 AND S4
S28        27   RD (unique items)
S29        26   S28 NOT (S15 OR S17 OR S24)
S30         2   S25(2N)(SEALANT? OR (SEALING OR VISCOUS)()MATERIAL?)
?  show files
File   2:INSPEC 1969-2005/Jan W5
         (c) 2005 Institution of Electrical Engineers
File   6:NTIS 1964-2005/Jan W5
         (c) 2005 NTIS, Intl Cpyrght All Rights Res
File   8:Ei Compendex(R) 1970-2005/Jan W3
         (c) 2005 Elsevier Eng.  Info. Inc.
File  34:SciSearch(R) Cited Ref Sci 1990-2005/Feb W1
         (c) 2005 Inst for Sci Info
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
         (c) 1998 Inst for Sci Info
File  99:Wilson Appl. Sci & Tech Abs 1983-2005/Jan
         (c) 2005 The HW Wilson Co.
File  94:JICST-EPlus 1985-2005/Dec W4
         (c)2005 Japan Science and Tech Corp(JST)
File  92:IHS Intl.Stds.& Specs. 1999/Nov
         (c) 1999 Information Handling Services
File 144:Pascal 1973-2005/Jan W5
         (c) 2005 INIST/CNRS
File 647:CMP  Computer Fulltext 1988-2005/Jan W4
         (c) 2005 CMP Media, LLC
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         (c) 2005 The Dialog Corp.
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         (c) 2005 ProQuest Info&Learning
File  65:Inside Conferences 1993-2005/Feb W1
         (c) 2005 BLDSC all rts. reserv.
File 103:Energy SciTec 1974-2005/Jan B2
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File 350:Derwent WPIX 1963-2005/UD,UM &UP=200509

File 347:JAPIO Nov 1976-2004/Oct(Updated 050208)

File 239:Mathsci 1940-2005/Mar

File 95:TEME-Technology & Management 1989-2005/Jan W1

File 25:Weldasearch-19662005/Jan

File 62:SPIN(R) 1975-2005/Nov W3

File 96:FLUIDEX 1972-2005/Feb

File 98:General Sci Abs/Full-Text 1984-2004/Sep

File 266:FEDRIP 2004/Nov

?

18/9/1 (Item 1 from file: 95)
DIALOG(R)File 95:TEME-Technology & Management

01557505 20010900923
Long term evaporation stability of sealant **glasses**
Geasee, P; Conradt, R
RWTH Aachen, D
75. Glastechnische Tagung, Kurzreferate (Poster-Beitraege), Wernigerode, D, 21.-23. Mai, 20012001
Document type: Conference paper Language: English
Record type: Abstract

ABSTRACT:
The evaporation of different glass compositions, namely (Mg,Ca,Ba)O-Al2O3-B2O3 (6.38 weight-%)-SiO2, (Mg,Ba)O-B2O3 (24.84 weight-%)-SiO2, and (Ca,Ba)O-Al2O3-SiO2 was investigated by the transpiration **method** (**flow** of 4 l/h) in a horizontal tube furnace, and by a high resolution thermal balance. The atmosphere applied was 833 mbar N2, 93 mbar H2 and 74 mbar H20. The temperature was 800 deg C. This is a specific situation where the initially glassy systems are converted into a partially crystallized state. The exposure time was 2000 h. As expected, a high initial evaporation loss were observed with the B2O3 containing system. However, after 5000 h, a constant rate of 2.7 micrometer/(cm(exp 2)h) was assumed. The magnesia containing aluminosilicate system showed a very low loss of 0.96 micrometer/(cm(exp 2).h), while the magnesia free system displayed an **initial mass** increase followed by a low loss rate of 0.05 micrometer/(cm(exp 2).h)..

DESCRIPTORS: EVAPORATION; LONG TERM BEHAVIOUR; LONG TERM INVESTIGATIONS; HEAT RESISTANCE; ALUMINOBOROSILICATE GLASS; BOROSILICATE GLASS; ALUMINOSILICATE GLASS; HIGH TEMPERATURE BEHAVIOUR; HIGH TEMPERATURE TEST; WEIGHT LOSSES; GLASS SEALS; MATERIALS QUALIFICATION; FUEL CELLS; FILM THICKNESS **MEASUREMENT** ; DECREASE
IDENTIFIERS: Glasdichtung; thermische Stabilitaet; Verdampfung; Dauertest ?

24/9/6 (Item 1 from file: 92)
DIALOG(R)File 92:IHS Intl.Stds.& Specs.

00156364
Standard Test Method **for** Flow Characteristics **of Preformed Tape** Sealants
DOCUMENT NUMBER: C1266
ISSUING ORGANIZATION: ASTM - American Society For Testing & Materials
DOCUMENT TYPE: United States of America;North America (NAFTA Countries)
YEAR: 1995 00004 PAGES LANGUAGE: ENGLISH
DESCRIPTORS: Tape **Sealants** : Flow **Measurement**
SUBJECT LOCATOR CODES:
L-44-10 BUILDING AND CONSTRUCTION **SEALANTS** TAPE/ **EXTRUDED** /PREFORMED
?

29/9/1 (Item 1 from file: 6)
DIALOG(R)File 6:NTIS

2048073 NTIS Accession Number: ASTM-C 1266-95/XAB
Flow Characteristics **of Preformed Tape** Sealants . **(ASTM Standard)**
American Society for Testing and Materials, West Conshohocken, PA.
Corp. Source Codes: 113500000
cJun 95 4p
Languages: English
Journal Announcement: GRAI9808
This test method is under the jurisdiction of ASTM Committee C-24 on Building Seals and Sealants and is the direct responsibility of Subcommittee C24.50 on Tape Sealants. Current edition approved April 15, 1995. Published June 1995.
Product reproduced from digital image. Order this product from NTIS by: phone at 1-800-553-NTIS (U.S. customers); (703)605-6000 (other countries); fax at (703)321-8547; and email at orders@ntis.fedworld.gov. NTIS is located at 5285 Port Royal Road, Springfield, VA, 22161, USA.
NTIS Prices: PC$22.50
Country of Publication: United States

Descriptors: *Standards; * **Sealants** ; *Tapes; Tape wrapping; Aging; Temperature effects; Loads(Forces); **Test** methods
Identifiers: Flow and flow rate; Flow-out behavior; Preformed **sealant** tapes; NTISASTM; NTISSDAA
Section Headings: 71B (Materials Sciences--Adhesives and Sealants); 89G (Building Industry Technology--Construction Materials, Components, and Equipment)
?

29/9/15 (Item 2 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

08801674 Genuine Article#: 330YR Number of References: 32
Title: Flow characteristics **and sealing ability of fissure** sealants
Author(s): Barnes DM (REPRINT) ; Kihn P; vonFraunhofer JA; Elsabach A
Corporate Source: UNIV MARYLAND BALTIMORE CTY,BALTIMORE COLL DENT SURG, SCH DENT, DEPT ORAL HLTH CARE DELIVERY/BALTIMORE//MD/21228 (REPRINT)
Journal: OPERATIVE DENTISTRY, 2000, V25, N4 (JUL-AUG), P306-310
ISSN: 0361-7734 Publication date: 20000700
Publisher: OPERATIVE DENTISTRY INC, INDIANA UNIV SCHOOL DENTISTRY, ROOM S411, 1121 WEST MICHIGAN ST, INDIANAPOLIS, IN 46202-5186
Language: English Document Type: ARTICLE
Geographic Location: USA
Subfile: CC CLIN--Current Contents, Clinical Medicine
Journal Subject Category: DENTISTRY, ORAL SURGERY & MEDICINE
Abstract: This study evaluated the relationship between fissure **sealant** viscosity, leakage prevention and the incidence of void formation of five commercially available pit-and-fissure **sealants** . Seventy-two intact, caries free human premolars and molars were divided into six **test** groups of 12 teeth each. All teeth were cleaned with a flour of pumice prophylaxis followed by etching for 60 seconds with 37% H3PO4, rinsing for 30 seconds and drying with oil-free air. Five commercial, light-cured fissure **sealants** and an unfilled version of one **sealant** were applied following manufacturers' instructions.

Teeth were thermal cycled for 5000 cycles from 5-50 degrees C with a one-minute dwell time at each temperature. Silver nitrate staining followed by mesiodistal sectioning was performed. Leakage and void formation were evaluated at X50 optical magnification.

Viscosity was assessed by syringing the fissure **sealants** into short pipettes, allowing free flow for 30 seconds and then light curing for one minute. The length of unfilled capillary was measured with a Vernier gauge.

All experimental data was subjected to a one-way ANOVA, and where differences were detected, they were identified by a post hoc Tukey hsd **test** at a priori alpha = 0.05.

Based on the conditions of the study, viscosity and now characteristics had no effect on sealing ability or void formation.
Identifiers--KeyWord Plus(R): LEAKAGE; PIT; RETENTION; INVITRO
Cited References:
*ADA COUNC DENT MA, 1976, V93, P134, J AM DENT ASSOC
*NIH CONS DEV C, 1984, V48, P1, J DENT ED S
*US PHS, 1991, DHHS PUBL
BOGERT TR, 1992, V14, P50, PEDIAT DENT
BROWN LJ, 1996, V127, P335, J AM DENT ASSOC
BURROW MF, 1990, V57, P348, J DENT CHILD
COHEN LA, 1993, V53, P241, J PUBLIC HEALTH DENT
CUETO EI, 1967, V75, P121, J AM DENT ASSOC
DONNAN MF, 1988, V165, P283, BR DENT J
FELDENS EG, 1994, V18, P187, J CLIN PEDIATR DENT
FLANAGAN RA, 1988, V9, P460, BIOMATERIALS
FRAZIER PJ, 1986, V65, J DENT RES
GARCIAGODOY F, 1987, V9, P9, CLIN PREVENTIVE DENT
GARCIAGODOY F, 1987, V114, P809, J AM DENT ASSOC
GOLDSTEIN RE, 1994, V125, P551, J AM DENT ASSOC

HICKS MJ, 1982, V16, P353, CARIES RES
HOVLAND EJ, 1985, V18, P179, INT ENDOD J
ISMAIL AI, 1995, V74, P1583, J DENT RES
LANG WP, 1988, V48, P133, J PUBLIC HLTH DENT
PARK K, 1993, V15, P418, PEDIATR DENT
RIPA LW, 1993, V27, P77, CARIES RES
RUDOLPH JJ, 1974, V32, P62, J PROSTHET DENT
SELWITZ RH, 1992, V52, P137, J PUBLIC HEALTH DENT
SIEGAL M, 1995, V55, P259, J PUBLIC HEALTH DENT
SIMONSEN RJ, 1987, V115, P31, J AM DENT ASSOC
SIMONSEN RJ, 1991, V122, P34, J AM DENT ASSOC
SIMONSEN RJ, 1989, V20, P75, QUINTESSENCE INT
WAGGONER WF, 1996, V127, P351, J AM DENT ASSOC
WENDT LK, 1988, V12, P181, SWED DENT J
WRIGHT JT, 1984, V6, P36, PEDIATR DENT
WU W, 1983, V17, P37, J BIOMED MATER RES
ZYSKIND D, 1998, V20, P25, PEDIAT DENT

29/9/26 (Item 2 from file: 96)

00049343 FLUIDEX NO: 0055765 SUBFILE: FS

Standard test **method for rheological (flow) properties of elastomeric** sealants .

Philadelphia, Pa., Amer. Soc. for Test. & Mater., May 9, 1969 Reapproved 1976, 3pp. (Amer. Nat. Standard ANSI/ASTM C639-69)., 1976

DOCUMENT AVAILABLE: YES
RECORD TYPE: ABSTRACT
LANGUAGES: English

This method describes a laboratory procedure for the determination of rheological (flow) properties of single- and multicomponent chemically curing **sealants** for use in building construction. Other suitable **flow characteristics** may be agreed upon by the seller and purchaser or specifier. Special nonsag properties and lower **flow characteristics** may be required for use in sloping joints where absolute leveling is not desired. (from Specification scope). (In: 1977 Annual book of ASTM Standards. Philadelphia, Pa., Amer. Soc. for **Test** . & Mater., 1977, Part 18, pp.350-352).

DESCRIPTORS: AMERICAN SOCIETY FOR **TESTING** AND MATERIALS; A.S.T.M. SINGLECOMPONENT STATICSEAL
CLASSIFICATION CODE(S) AND DESCRIPTION: 78 (FLUID ABSTRACTS: PROCESS ENGINEERING)
?

30/9/1 (Item 1 from file: 94)
DIALOG(R)File 94:JICST-EPlus

02085430 JICST ACCESSION NUMBER: 94A0566188 FILE SEGMENT: JICST-E
Special issue : Recent problems surrounding sealing work. Centering on problems on adhesive property and problems on construction of siding dwelling house. Present state of sealant for double glazing and future problems. A case of polysulphide and IIR.
HIROISHI MASATAKA (1)
(1) Yokohama Rubber Co., Ltd.
Bosui Janaru(Bosui Journal), 1994, VOL.25,NO.6, PAGE.76-77, FIG.1
JOURNAL NUMBER: S0412AAL ISSN NO: 0289-3894
UNIVERSAL DECIMAL CLASSIFICATION: 692+ 699.82 691.1
LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan
DOCUMENT TYPE: Journal
ARTICLE TYPE: Introduction article
MEDIA TYPE: Printed Publication
ABSTRACT: Double layer glass prevents condensation by enclosing dry air between two glass sheets, therefore, circumference of double layer edge is required to seal with sealant. As working performance necessary for this **sealant** , sufficient **flow characteristics** without intermittence are needed. Performances comparison, etc. were examined on single system using one sort of sealant and dual system using two kinds which could be satisfied.
DESCRIPTORS: multiple glass; sealant; dry air; closing(airtightness); dew condensation; preclusion(protection); adhesive strength; airtightness; butyl rubber; glazing work; polysulfide(organic)
BROADER DESCRIPTORS: flat glass; glass; ceramics; plate classified by material; plate(material); filling material; material; air; gas; condensation; phase transition; strength; property; copolymer; polymer; synthetic rubber; rubber; construction work; construction(work); organosulphur compound
CLASSIFICATION CODE(S): RB03050S; RB01032Q; RA06030O

30/9/2 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX

011868748 **Image available**
WPI Acc No: 1998-285658/199825
XRAM Acc No: C98-088335
XRPX Acc No: N98-224579
Method of controlling the cold flow characteristics **of a** viscous material **- controls the stability and resistivity without decreasing the material's normal function, making it suitable for use as an artificial cartilage**
Patent Assignee: HOGG J M (HOGG-I)
Inventor: HOGG J M
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 5746963	A	19980505	US 93134844	A	19931012	199825	B
			US 94332366	A	19941031		
			US 96699043	A	19960606		

Priority Applications (No Type Date): US 94332366 A 19941031; US 93134844 A 19931012; US 96699043 A 19960606
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5746963	A		4	B29C-045/57	CIP of application US 93134844 Cont of application US 94332366

Abstract (Basic): US 5746963 A

An artificial ball-and-socket prosthesis comprises: (a) a viscous artificial cartilage (1) incorporating a fibre web mesh (4) encapsulated within an outer shell (2), and enclosing a ball (5) attached to a shaft (3), wherein (b) the preferred materials include cobalt-chromium-molybdenum (Co-Cr-Mo) alloy or titanium-aluminium-vanadium (Ti-6Al-4V) alloy in conjunction with an ultra-high molecular weight polyethylene acetabular bearing surface between the shell and femoral units, given that - (c) the pressure required to cause separation of the ball from the socket is determined by the difference between the diameter (A) of the opening of the shell and the diameter (B) of the ball, the encapsulation material, and the type, size, and pattern of the fibres used to control the cold **flow characteristics** of the **viscous material** (1). Also claimed are alternative applications of the principle of controlled cold flow characteristics, including a plastic bearing for a wheel.

USE - For forming an artificial ball-and-socket prosthesis.

ADVANTAGE - Enables the cold **flow characteristics** of a **viscous material** to be adjusted to meet specific requirements without materially decreasing its normal function.

Dwg.2/3

Title Terms: METHOD; CONTROL; COLD; FLOW; CHARACTERISTIC; VISCOSITY; MATERIAL; CONTROL; STABILISED; RESISTOR; DECREASE; MATERIAL; NORMAL; FUNCTION; SUIT; ARTIFICIAL; CARTILAGE

Derwent Class: A96; D22; P32

International Patent Class (Main): B29C-045/57

International Patent Class (Additional): A61F-002/34

File Segment: CPI; EngPI

Manual Codes (CPI/A-N): A04-G02E3; A12-H03; A12-V02; D09-C01D

Polymer Indexing (PS):

<01>

001 018; R00326 G0044 G0033 G0022 D01 D02 D12 D10 D51 D53 D58 D82; H0000; P1218 P1161; P1150

002 018; ND01; Q9999 Q8048 Q7987; Q9999 Q7896 Q7885; K9676-R; K9483-R; B9999 B5094 B4977 B4740

?

Bates, Darcy

From: Unknown@Unknown.com
Sent: Friday, February 04, 2005 11:45 AM
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ResponseHeader=Commercial Database Search Request

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MyDate=Fri Feb 4 11:44:17 EST 2005

submitto=STIC-EIC2800@uspto.gov

Name=Michael Cygan

Empno=77553

Phone=2-2175

Artunit=2855

Office=JEF 8A51

Serialnum=10/761171

PatClass=73/53.01, 822

Earliest=1/20/2004

Format3=email

Searchtopic=A mass of solid or viscous material is placed between two plates. One of the plates is moved toward the other, compressing the material to a predetermined point at which some of the material extrudes from between the two plates. The mass of the extruded material is compared to the initial mass to determine flow characteristics of the material.

Claim 1:
A method for determining the flow characteristics of a sealant material, wherein the test method comprises:
applying an initial mass of sealant material as a sealant material layer between a surface of a flrst test specimen and a surface of a second test specimen to form a test specimen mssembly;
providing pressure upon the test assembly so as to compress the sealant material between the first and second test specimens for a specific length of time, thereby extruding sealant material iom between the two test specimen slzrfaces;
determining the mass of sealant material extruded âom the test specimen assembly after said length of time; and
calculating a tlow characteristic of the sealant material as the ratio of the mass of extruded sealant material to the initial mass of the sealant material layer.

Comments=

send=SEND